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TatA (Eco)	M- <u>GGISIWQLLIIAVIVVLLFGTKKL</u> G-----	26
TatE (Eco)	M- <u>GEISITKLLVVAALVLLFGTKKL</u> R-----	26
TatAy (Bsu)	<u>M</u> - <u>PIGPGSLAVIAIIVALIIIFGPKKL</u> P-----	25
TatAd (Bsu)	<u>M</u> <u>FSNIGIPGLILIFVIAIIIFGPSKL</u> P-----	27
TatAc (Bsu)	<u>M</u> - <u>ELSFTKILVILFVGFLVFGPKL</u> P-----	25
TatB (Eco)	<u>MF</u> - <u>DIGFSELLLVFIIGLVVLGP</u> <u>QRLPVAVKTVAGWIRALRSLATTVQNELTQELKQ</u>	49
	* *	
TatA (Eco)	----- <u>SIGSDLGASIKGFKKAMS</u> DDE---- <u>PKQDKTSQDADFTAKTI</u>	64
TatE (Eco)	----- <u>TLGGDLGAAIKGFKKAMN</u> DDD---- <u>A-AAKKGADVDLQAEKL</u>	63
TatAy (Bsu)	----- <u>ELGKAAGDTLREFKNATKGL</u> T---- <u>SDEEEKKKEDQ</u> -----	57
TatAd (Bsu)	----- <u>EIGRAAKRTLLEFKSATKSL</u> V---- <u>SGDEKEEKS AELTAVK</u> -	64
TatAc (Bsu)	----- <u>ALGRAAGKALSEFKQATSGL</u> T---- <u>QDIRKN</u> SEN----- <u>K</u> -	57
TatB (Eco)	<u>EFQDSLKKVEKASLTNLTPELKASMD</u> ELRQAESMKRSYVANDPEKASDEAHTIHP	114
 *	
TatA (Eco)	<u>ADKQADTNQE</u> ----- <u>QAKTEDAKRHDKEQV</u>	89
TatE (Eco)	<u>SHKE</u> -----	67
TatAy (Bsu)	-----	57
TatAd (Bsu)	----- <u>QDKNAG</u>	70
TatAc (Bsu)	----- <u>EDKQM</u> -	62
TatB (Eco)	<u>VVKDNEAAHEGVTPAAAQTQASSPEQK</u> PETTPEPVVKPAADAEPKTAAPSPSSSDKP	171

FIG. 1A

TatC (Eco)	<u>MSVEDTQ</u> -- <u>PLITHLIELRKRL</u> <u>LNCCI</u> IAVIVIFLCLVYFANDIYH-LVSAPLIK	51
TatCy (Bsu)	<u>MTRMKVNQMSLLEHIAELRKRL</u> <u>LLIVALAFVVF</u> FIAGFFLAKPIIVYLQETDEAK	50
TatCd (Bsu)	<u>MDKKETH</u> --- <u>LIGHLEELRRRI</u> <u>IVTLAAFFLFLITAF</u> LFVQDIYDWLIRDLDGK	51
	* *	
TatC (Eco)	<u>QLPQGSTM</u> IATDVASPF ^{FT} <u>IKLTFMVSLILSAPVILYQV</u> WAFIAPALYKHERR	105
TatCy (Bsu)	<u>QL</u> ---- <u>TLNAFN</u> LTDP ^{LY} VFMQFAFIIGIVLTSPVILYQ ^{LW} AFVSPGLYEKERK	104
TatCd (Bsu)	----- <u>LAVLGPSEILWVY</u> MLSGICAIAASIPVAAYQLWRFVAPALTKTERK	98
 *	
TatC (Eco)	<u>LVVPLL</u> V--- <u>SSSL</u> <u>FYIGMAFAYFVVFPLAFGFLA</u> NTAPE-GVQVSTD <u>IASYL</u>	155
TatCy (Bsu)	<u>VTLSYI</u> --- <u>PVSILL</u> FLAGLSFSYIILFPFVVD ^{FM} KRISQDLNVNQVIGINEYF	155
TatCd (Bsu)	<u>VTIMYIMYIP</u> <u>GLFAL</u> FLAGISFGYFVLPFIVLSFLTHLSSG-HFETMFTADRYF	151
 *	
TatC (Eco)	<u>SFVMALFMAFGVSFEV</u> PVAIVLLCWMGITSPE ^{DL} RKKRPYVLVGA ^{FV} VGMLLTP	209
TatCy (Bsu)	<u>HFL</u> LQLTIPFGLLFQMPVILMFLTRLGIVTPMFLAKIRK ^{YAY} FTLLVIAALITP	209
TatCd (Bsu)	<u>RFMV</u> NLSLPFGFLFEMPLVVMFLTRLGILNPYRLAKARKLSYFLLIVVSILITP	205
	* *	
TatC (Eco)	<u>PDVFSQ</u> TLLAIPMYCLFEIGVFFSRE- <u>YVGKGRNREE</u> ENDAEAESEKTEE	258
TatCy (Bsu)	<u>PELLSH</u> MMVTVP ^{LL} ILYEISILISKAAYRKAQKSSAADRDVSSG-----Q	254
TatCd (Bsu)	<u>PDF</u> ISDFLVMIP ^{LL} LVLF ^{EV} SVTL ^{SAF} VYKKRMRE-----ETAAA-----A	245
	* *	

FIG. 1B

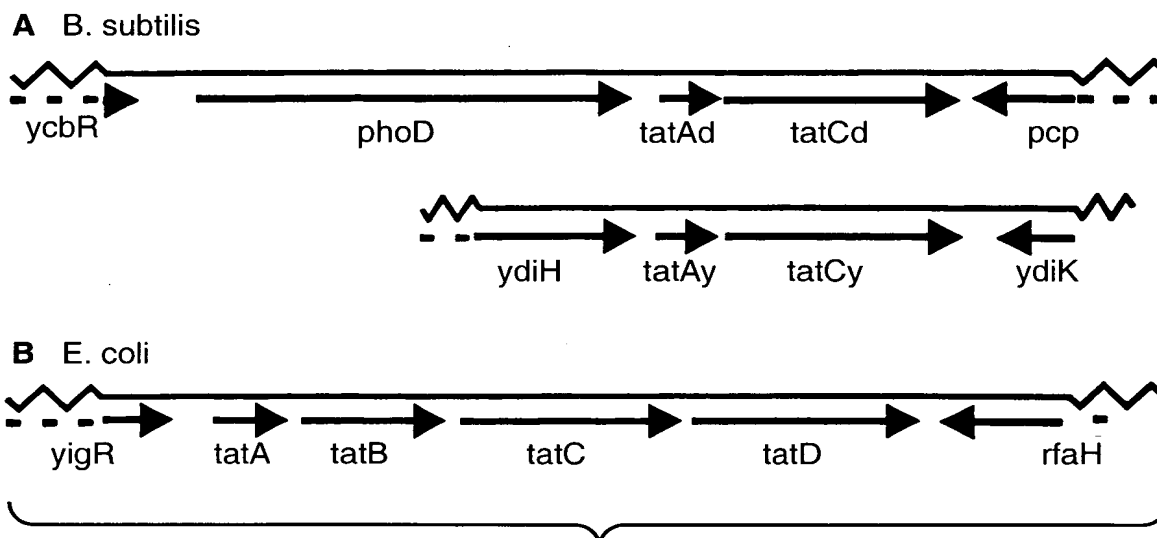
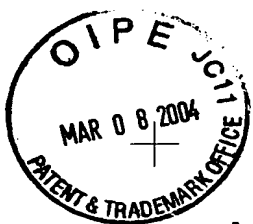


FIG. 2

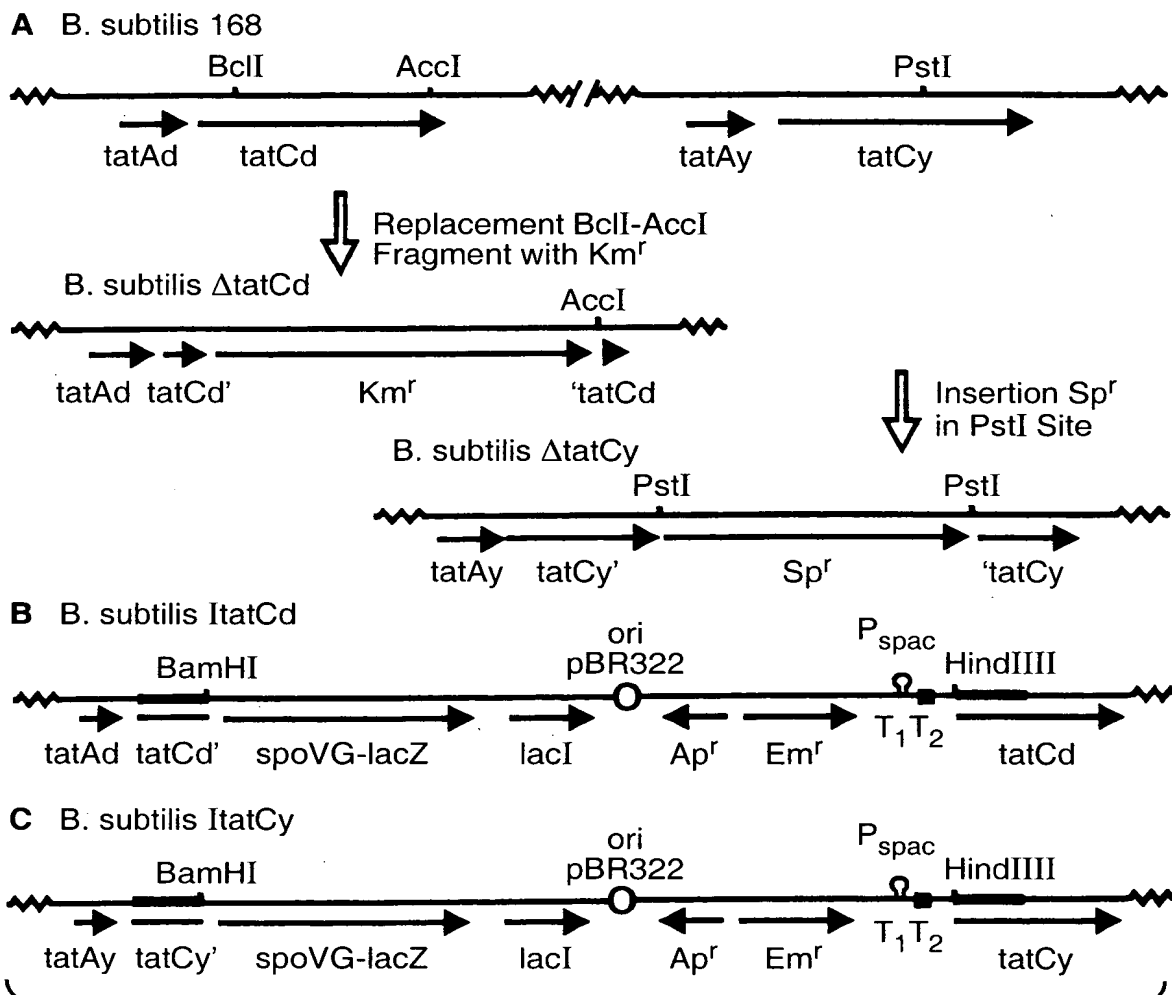


FIG. 3



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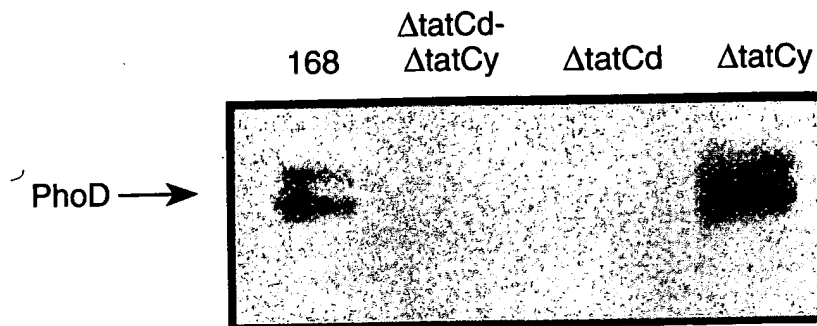


FIG. 4A

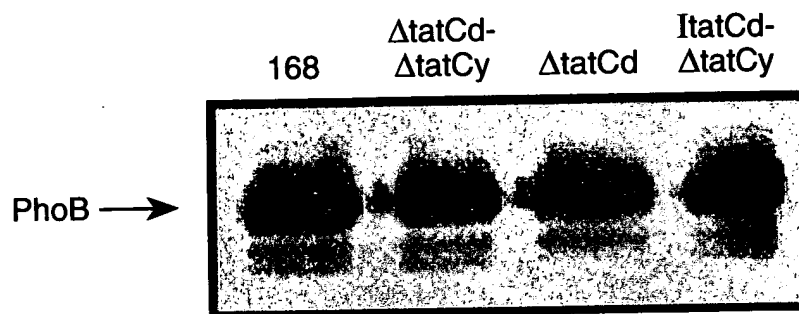
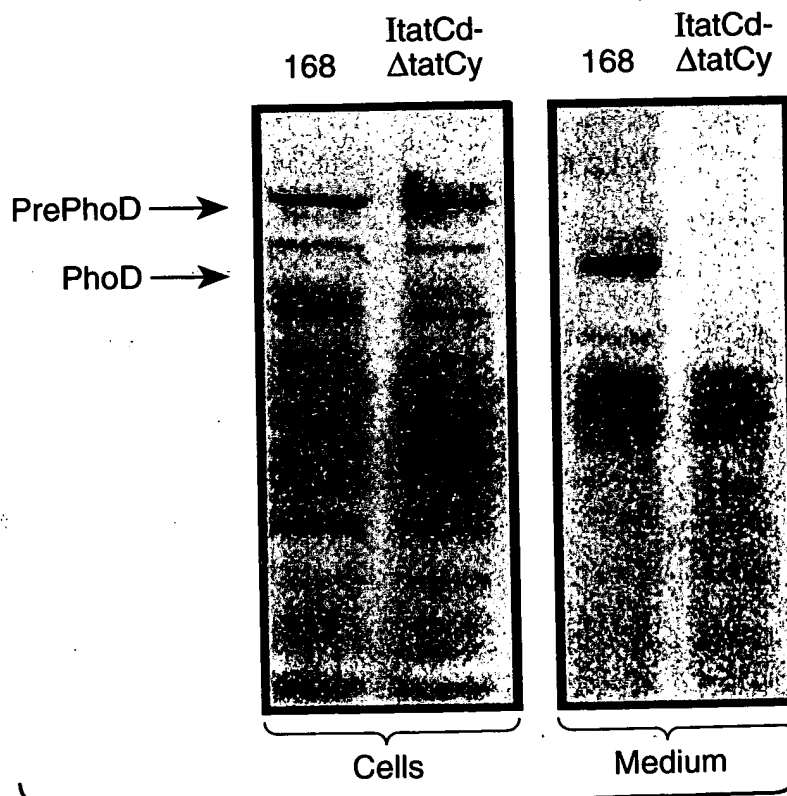


FIG. 4B



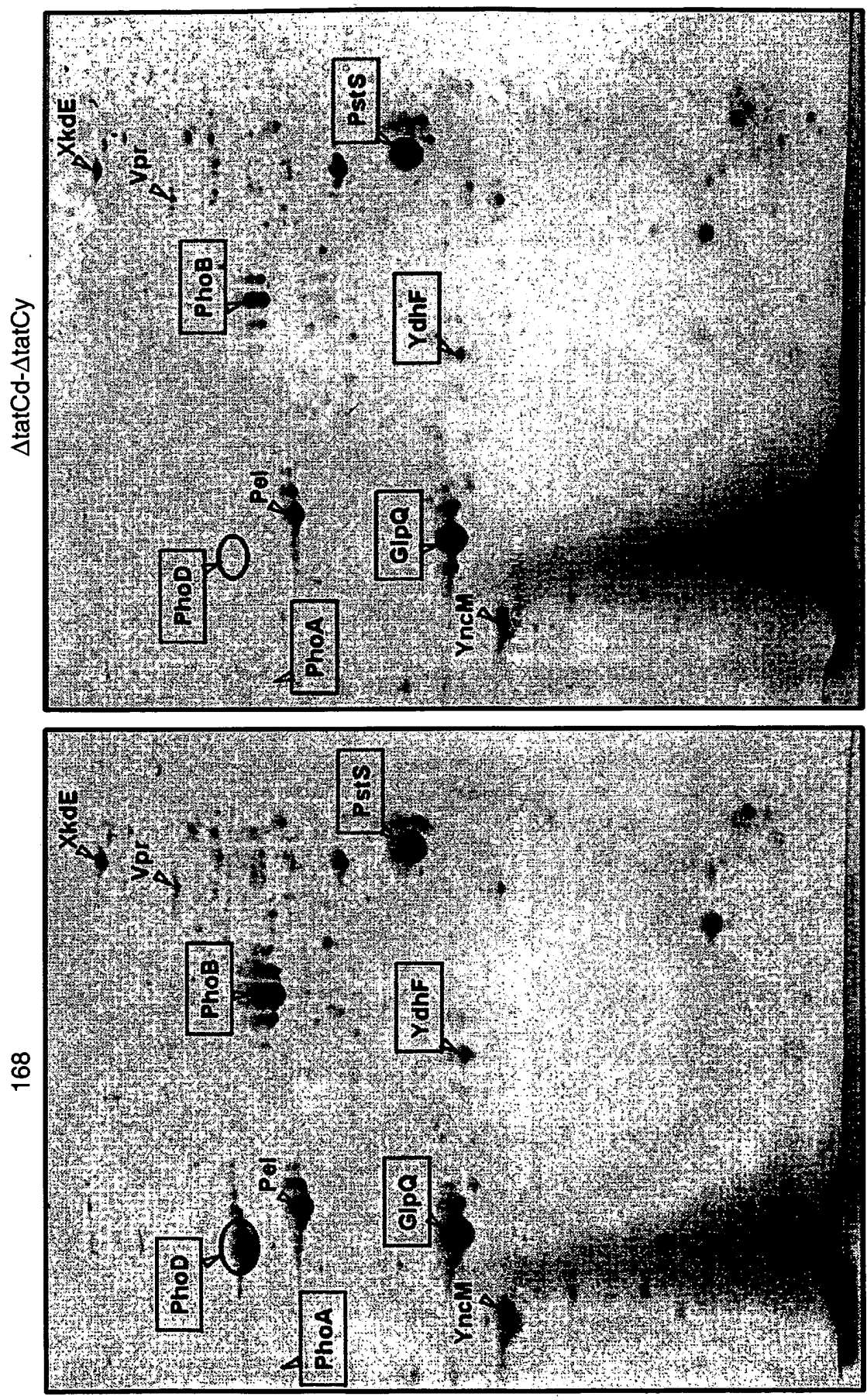


FIG._5



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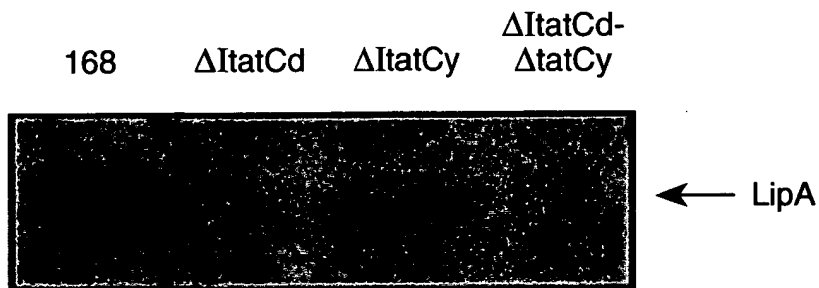


FIG._6

Protein	N	h	RR-Motif	H	h	C
AlbB	1	0.1	RRILL	27	2.0	AIA
AmyX TM	9	-0.8	RRSFE	15	1.1	-
AppB TM	8	0.5	RRTLm	19	2.3	-
LipA	7	-1.1	RRIIA	19	1.2	AKA
OppB TM	8	-0.6	RRLVY	24	2.0	-
PbpX	2	-2.2	RRRKL	14	2.9	WNA
PhoD	3	-1.3	RRKFI	17	0.9	VGA
QcrA TM	1	-1.1	RRQFL	19	1.3	-
TlpA TM	1	-0.8	RRLII	21	2.4	-
WapA ^W	1	-3.0	RRNFK	18	2.3	VLA
WprA	8	-1.7	RRKFS	20	1.9	AAA
YceA TM	1	-0.4	RR AFL	21	2.2	-
YesM TM	1	-1.5	RRMKI	20	2.4	QYA
YesW	1	-1.3	RRSCL	19	2.0	VKA
YfkN TM	1	-1.2	RRTHV	17	1.7	IHA
YkpC	8	-1.0	RRVAI	17	2.3	SLA
YkuE	1	-1.3	RRQFL	17	1.0	GYA
YmaC	7	0.0	RRFLL	15	2.4	YSL
YubF TM	9	-2.7	RRNTV	23	2.0	-
YuiC	8	0.2	RRLLM	20	1.9	IEA
YvhJ TM	2	-1.7	RRKIL	18	2.5	-
YwbN	1	-1.8	RRDIL	23	1.4	QTA

FIG._7



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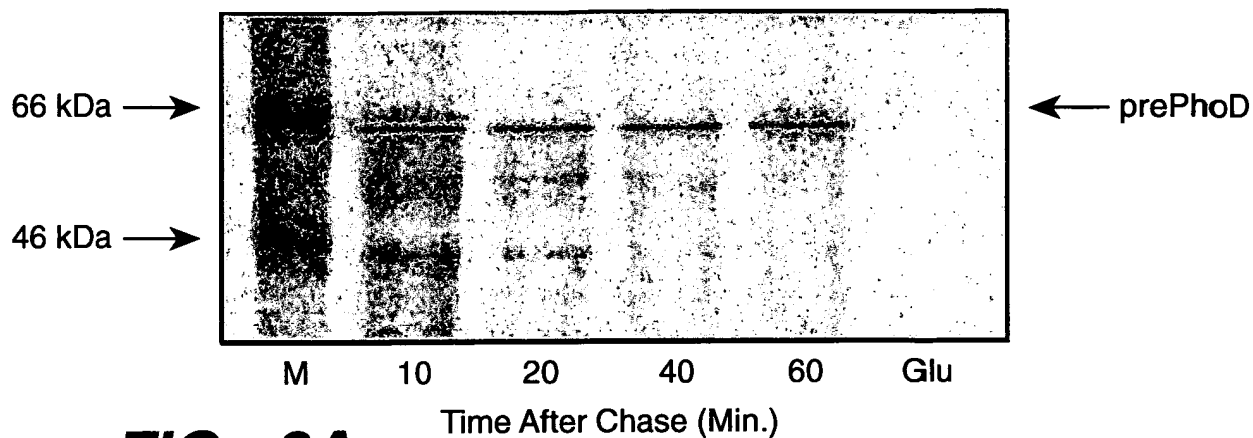
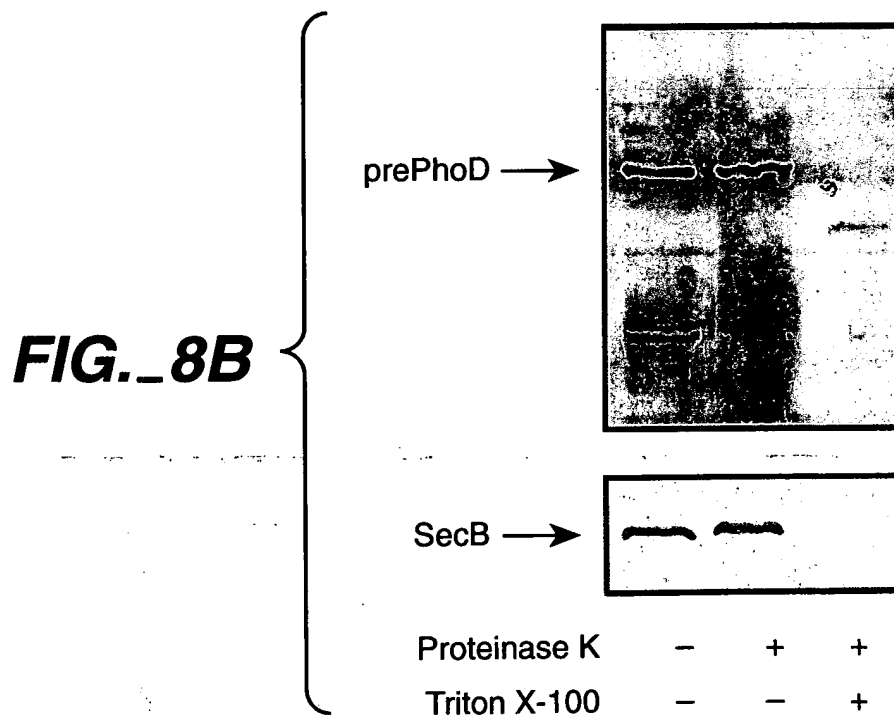


FIG._8A





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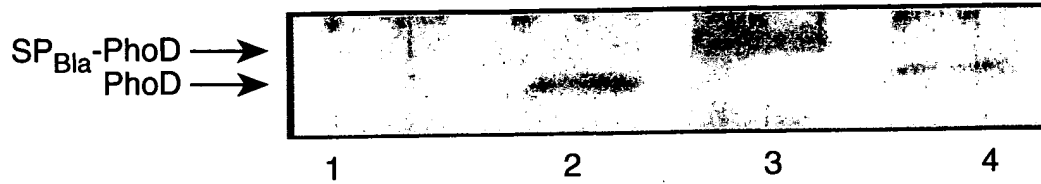


FIG._9A

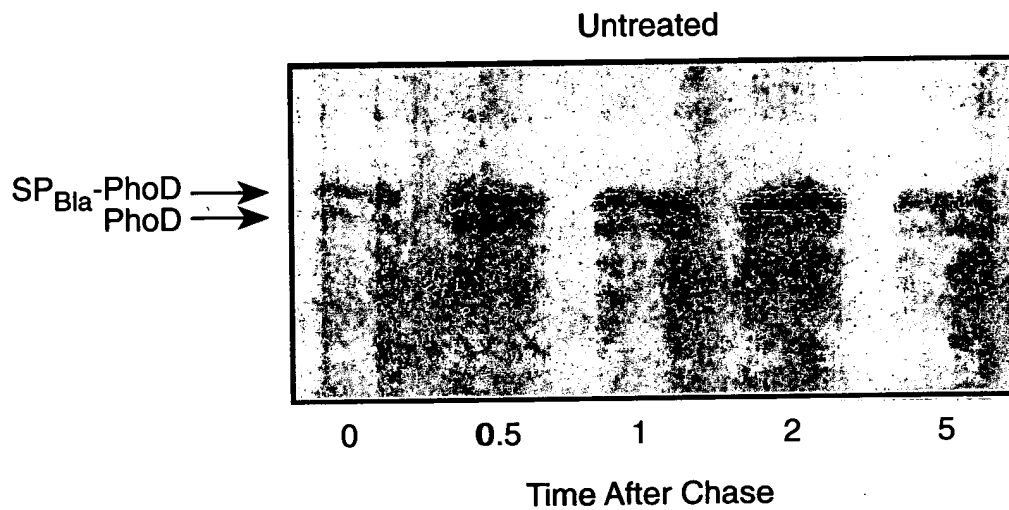


FIG._9B

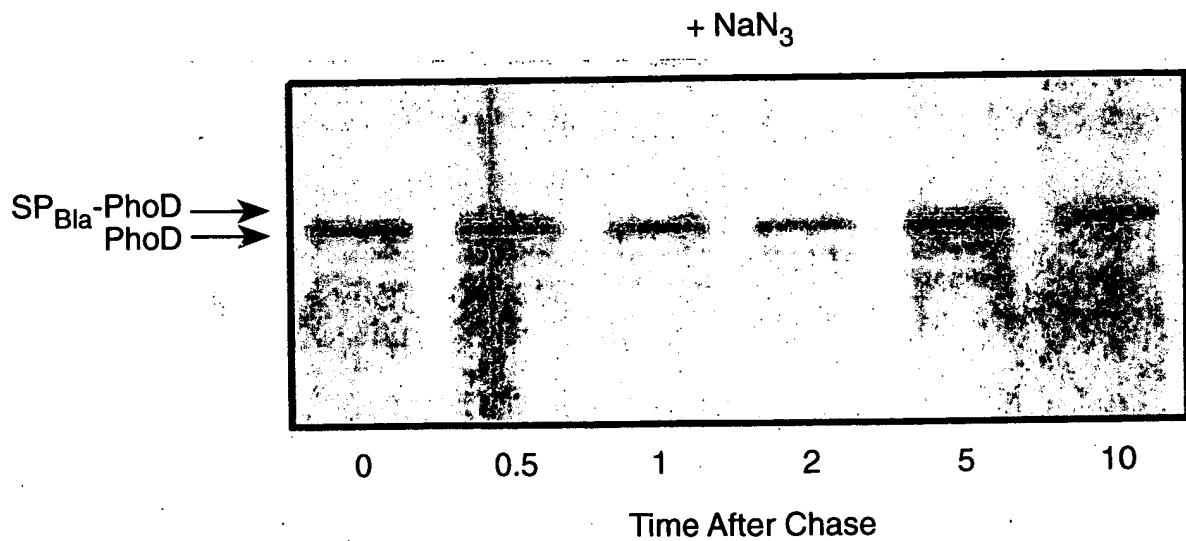


FIG._9C

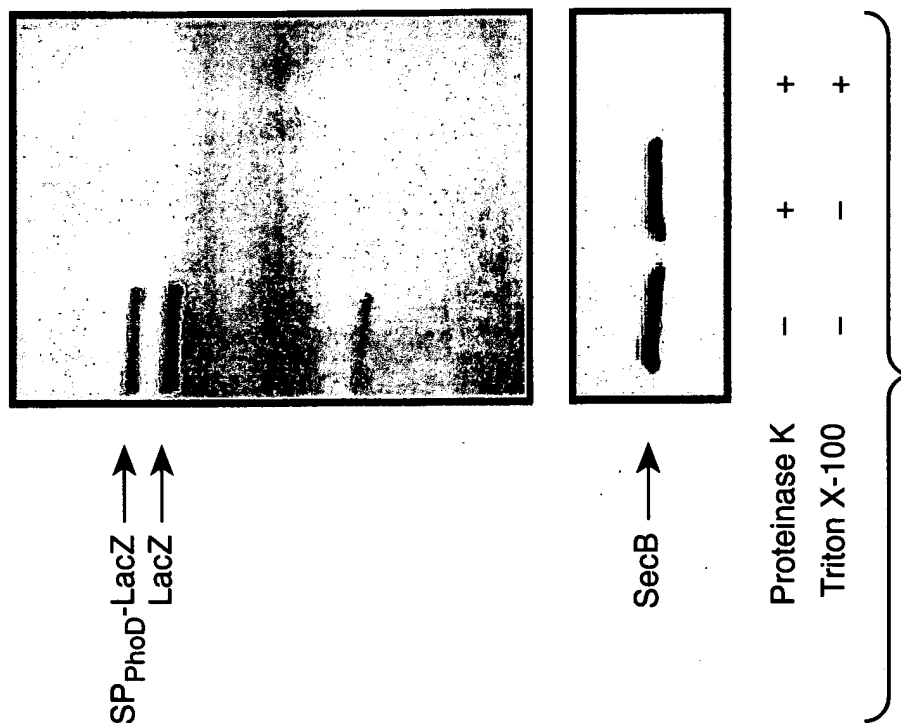


FIG._10B

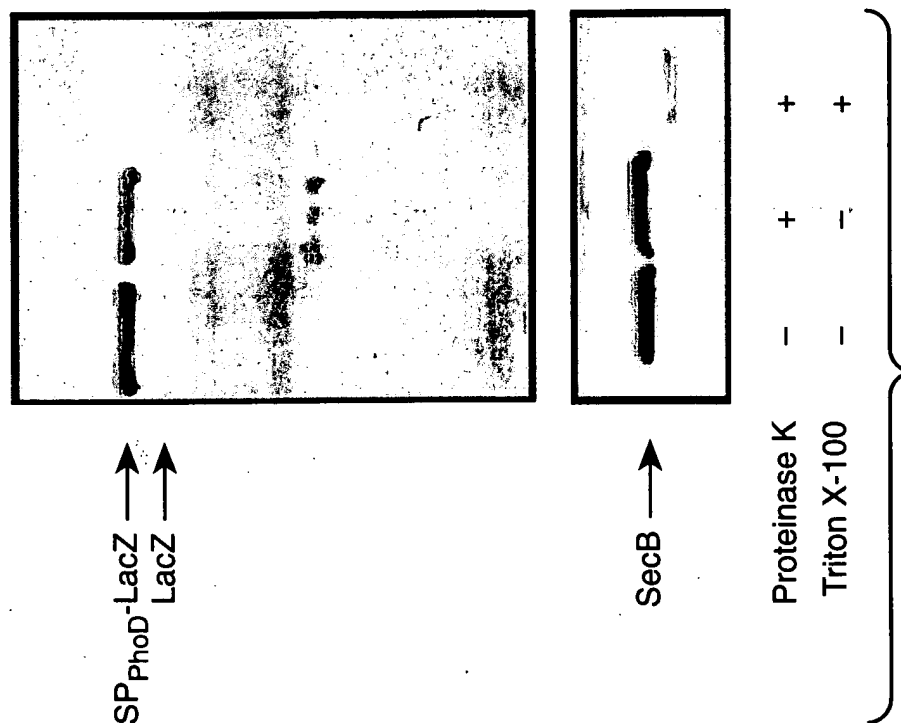


FIG._10A



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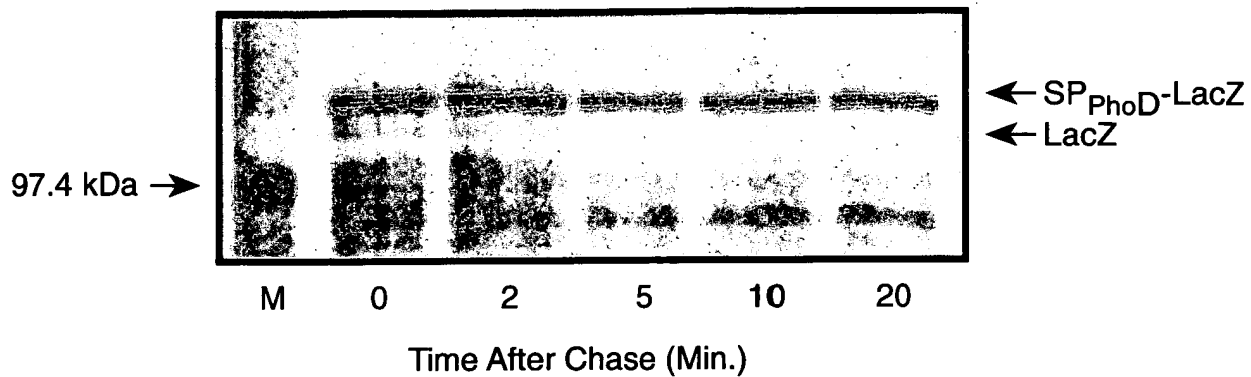


FIG._11A

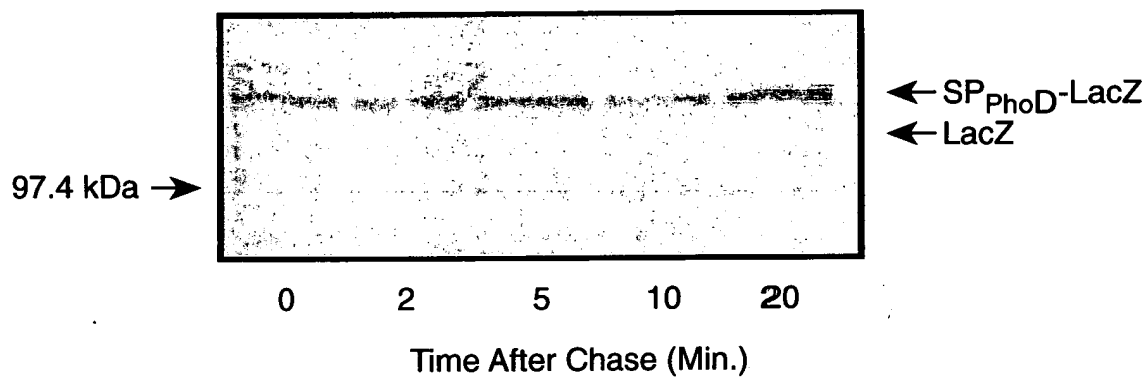
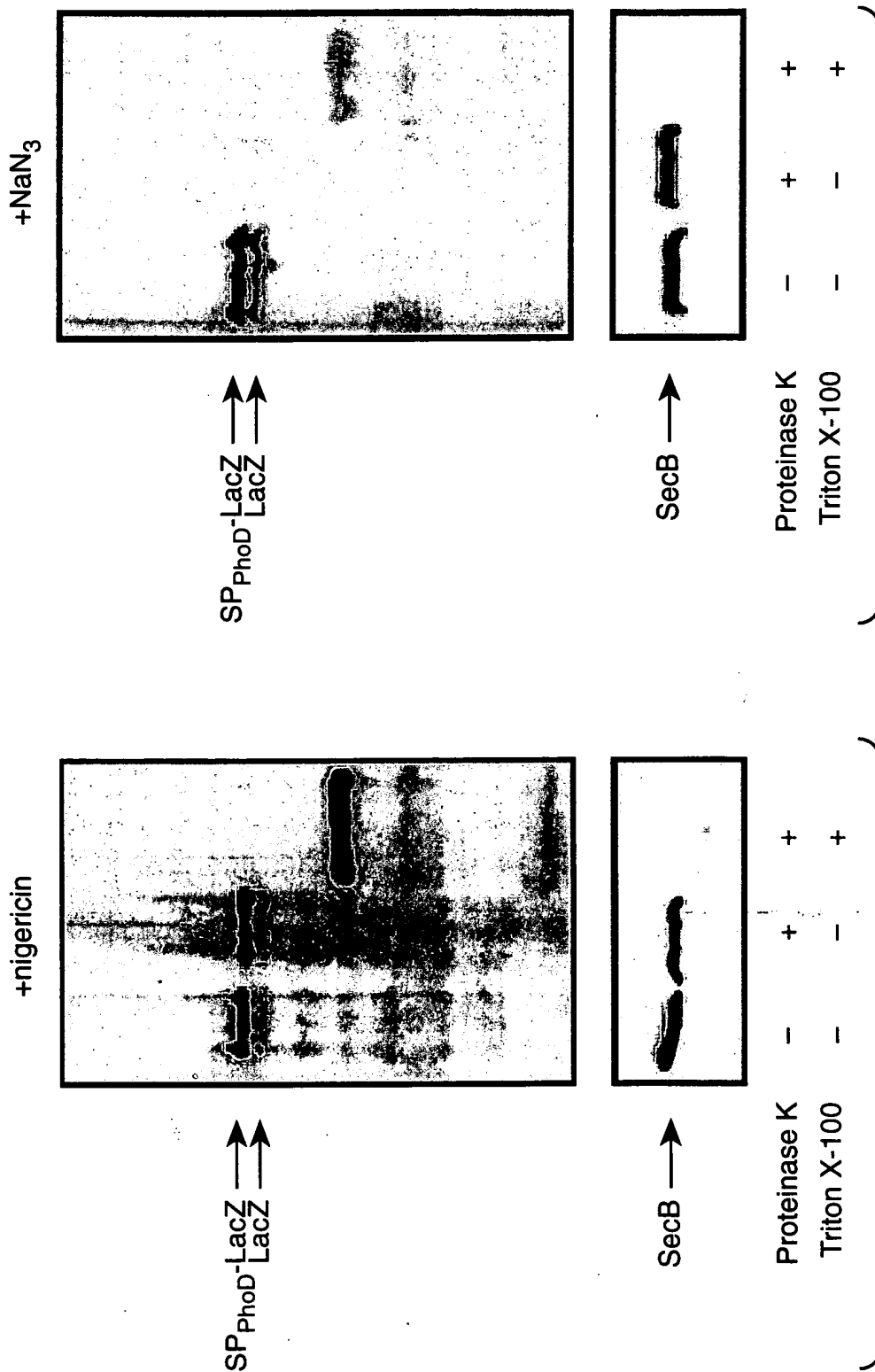


FIG._11B



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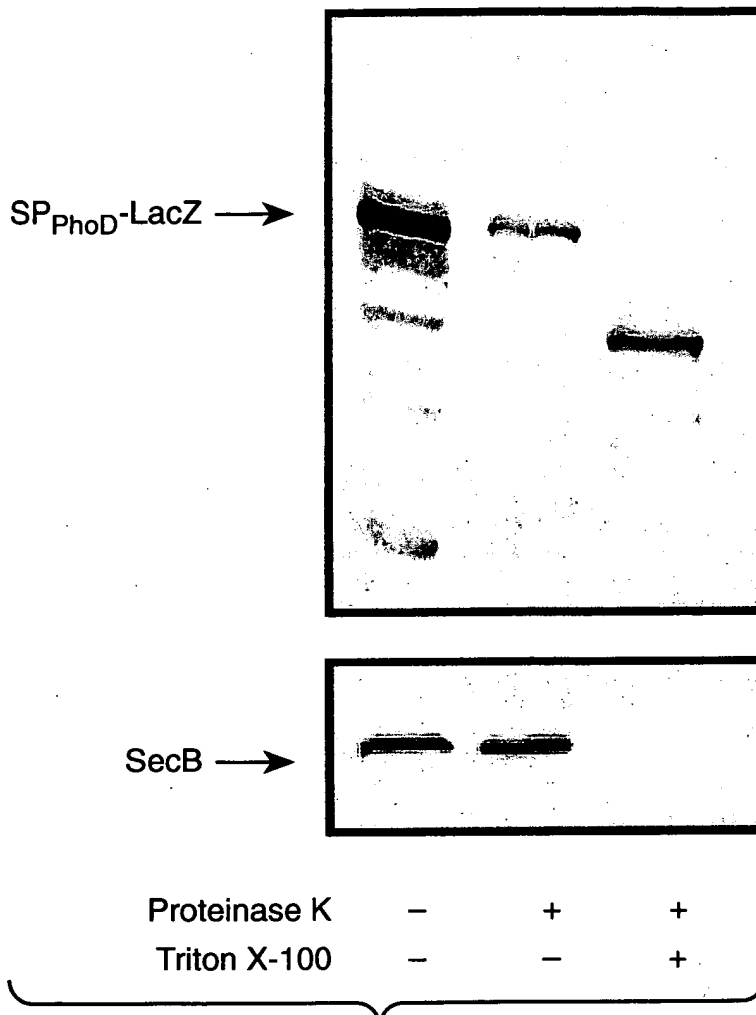


FIG. 13

Homologs in *B. alcalophilus*

TatA

MGGLSVGSVVLIALVALLIFGPKKLPELGKAAGSTLREFKNATK
GLADDDDDTKSTNVQKEKA

TatC

MTMMTPNQQTSKKKKRKGRKGRVPMQDMSIMDHAEELRRRIF
VLAFFIVALIGGFFLAVPVITFLQNSPQAADMPFNAFRLTDPLRV
YMNFAVITALVLIIPVILYQLWAFVSPGLKENEQKATLAYIPIAFL
LFLAGIAFSYFILLPFVISFMGQMADRLEINEMYGINEYFSFLFQL
TIPEGLLFQLPVVVMFLTRLGVVTPFTFLRKIRKYAYFALLVIAGII
TPPELTSHLFVTVPMLILYEISITISAITYRKYHGTTHNGQESAK